

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor George E. Meyer, Secretary Gloria L. McCutcheon, Regional Director Southeast Region Sturtevant Service Center 9531 Rayne Road Sturtevant, Wisconsin 53177 TELEPHONE 414-884-2300 FAX 414-884-2306

November 24, 1999

In Reply Refer To: FID# 224649870
BRRTS# 03-41-123738
County of Milwaukee
BRR-LUST

Mr. Gregg Apostoloff Archdiocese of Milwaukee 7301 W. Nash Street Milwaukee, WI 53216

SUBJECT: Closure Request for Holy Cross Cemetery, 7301 W. Nash Street, Milwaukee, WI

Dear Mr. Apostoloff

The Wisconsin Department of Natural Resources (WDNR) has reviewed the report entitled *Closure Request for the Holy Cross Cemetery property*, dated August 27, 1999, that was prepared by your consultant, Advent Environmental. The report contained a request that the WDNR grant "No Further Action" status for the site. Based upon the information in the case file and in the above referenced report, it appears that the degree and extent of contamination has been determined in the soil and groundwater at the site.

Due to the presence of benzene and methyl tert-butyl ether (MTBE) in the groundwater, at a concentration above the NR 140 Enforcement Standard (ES), a requirement of case closure is that a "groundwater use restriction" be placed on the deed of the property, according to s. NR 726.05(8)(am). You may wish to submit a draft copy of the proposed deed restriction prior to placement on the deed of the property so that the WDNR can verify that the restriction is acceptable. The language in the deed restriction should follow the template contained in the guidance document entitled "Close Out Guidance on the Use of Deed and Groundwater Use Restrictions and Deed Notices". If you need a copy of this document, please contact me. In addition to the language, please attach a map that identifies the location of the remaining groundwater contamination to the deed restriction.

After the WDNR receives an official copy of an acceptable deed restriction from the Register of Deeds office and copies of the well abandonment forms for all on-site monitoring wells, the site will be tracked as closed on the WDNR's computer database.

The WDNR appreciates the actions you have taken to restore the environment at this site. If you have any questions regarding this letter you may contact me at (414) 263-8541. Please refer to the FID and BRRTS numbers on the top of this letter in any future correspondence.

Sincerely,

Andrew Boettcher Hydrogeologist

cc: Advent Environmental

SER Case File



Document Number

GROUNDWATER USE RESTRICTION

Declaration of Restrictions

In Re: LANDS IN SW-SE & NW 1/4, SECTIONS 10-7-21 LANDS AND PART VACATED ENGLEWOOD SUBDIVISION BEWEEN WEST APPLETON AVENUE, WEST BURLEIGH STREET, WEST LISBON AVENUE, NORTH 76TH STREET, AND WEST NASH STREET, EXCEPT ROYAL PARK VIEW AND 45' PARCEL ADJACENT BLOCK 6 ON SOUTH, IN THE CITY OF MILWAUKEE, COUNTY OF MILWAUKEE, STATE OF WISCONSIN.

a/k/a 7301 West Nash Street, Milwaukee, Wisconsin

STATE OF WISCONSIN) ss COUNTY OF MILWAUKEE)

7883042

REGISTER'S OFFICE | SS Milwaukee County, WII

RECORDED AT 9:18 AM

03-09-2000

REEL___IMAGE

WALTER R. BARCZAK REGISTER OF DEEDS

AMOUNT 14.00

Recording Area

Return to: Jeff Tracy Advent Environmental Services PO Box 277 Mequon, WI 53092-0277

291-9999-100-9

Tax Key No.

WHEREAS, Archdiocese of Milwaukee Catholic Cemeteries is the owner of the above-described property.

WHEREAS, one or more gasoline or diesel fuel discharges have occurred on this property. Contaminated groundwater above ch. NR 140, Wis. Adm. Code enforcement standards existed on this property at the following locations on May 14, 1999: 8.8 parts per billion (ppb) benzene at CS-1, and 82 ppb methyl-tert-butyl-ether at MW-5. In addition, benzene-contaminated soil existed on the property at the following locations on July 20, 1998: HCR-1 (61 ppb), HCR-2 (260 ppb), and HCR-3 (97 ppb). The monitoring well and soil sample locations are illustrated on the attached figure.

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct further groundwater remediation activities at the present time.

WHEREAS, natural attenuation has been approved by the Department of Natural Resources to remediate groundwater contamination exceeding ch. NR 140 groundwater standards within the boundaries of this property.

WHEREAS, construction of wells where the water quality does not comply with drinking water standards in ch. NR 809 Is restricted by chs. NR 811 and NR 812, Wis. Adm. Code. Special well construction standards or water treatment requirements, or both, or well construction prohibitions may apply.

NOW THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied, and improved subject to the following limitation and restrictions:

Anyone who proposes to construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater, or it's successor agency, to determine what specific requirements are applicable, prior to constructing or reconstructing a well on this property. No well may be constructed on this property unless applicable requirements are met. The following numbers are the Wisconsin Department of Natural Resources case numbers associated with this site: BRRTS No. 03-41-123738, FID No. 241649870.

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If construction is proposed on this property that will require dewatering, or if groundwater is to be otherwise extracted from this property, while this groundwater use restriction is in effect, the groundwater shall be sampled and analyzed fro contaminants that were previously detected on the property and any extracted groundwater shall be managed in compliance with applicable statutes and rules.

This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase, or otherwise. This restriction benefits and is enforceable by the Wisconsin Department of Natural Resources, its successors or assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate this covenant, to prevent the proposed violation or to recover damages for such violation.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that one or more of the restrictions set forth in this covenant is no longer required. Upon the receipt of such a request, the Wisconsin Department of Natural Resources or its successor shall determine whether or not the restrictions contained herein can be extinguished. If the Department or its successor determines that the restrictions can be extinguished, an affidavit, attached to a copy of the Department's written determination, may be recorded to give notice that this deed restriction, or portions of this deed restriction, are no longer binding.

By signing this document, <u>Gregg Apostoloff</u> asserts that he is duly authorized to sign this document on behalf of the <u>Archdiocese of Milwaukee Catholic Cemeteries</u>.

IN WITNESS WHEREOF, the owners of the pday of, 2000.	property have executed this Declaration of Restrictions, this
Signature: <u>Sugg F. Opostoloff</u> Printed Name: <u>Spegg Apostoloff</u>	

Subscribed and sworn to before me this 23 day of February, 2000.

Motary Public, State of Wisconsin My commission expires 9/21/2003

This document was drafted by the Wisconsin Department of Natural Resources.

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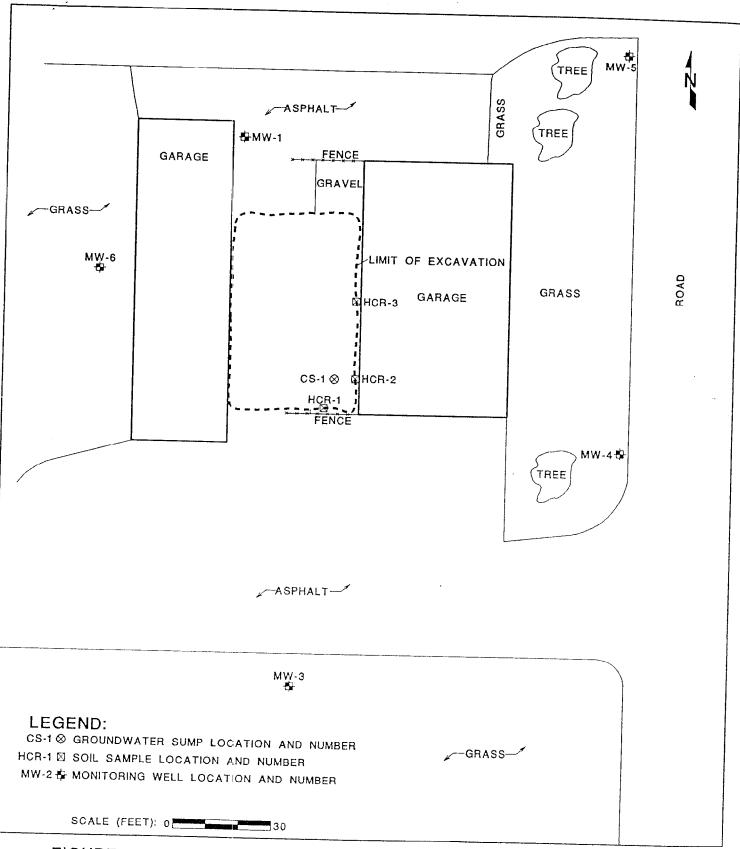
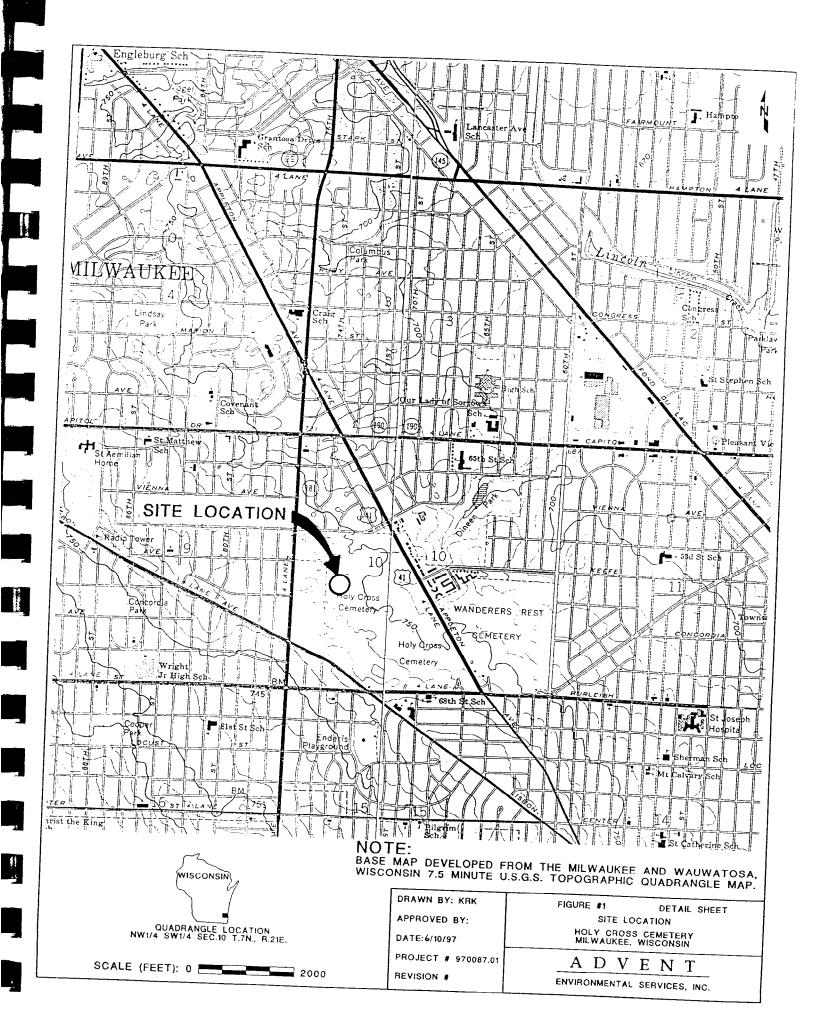


FIGURE 1 MONITORING WELL AND SOIL SAMPLE LOCATIONS
HOLY CROSS CEMETERY
MILWAUKEE, WISCONSIN

ADVENT

ENVIRONMENTAL SERVICES, INC. DATE: 1/31/00 DRAWING #970087.02J



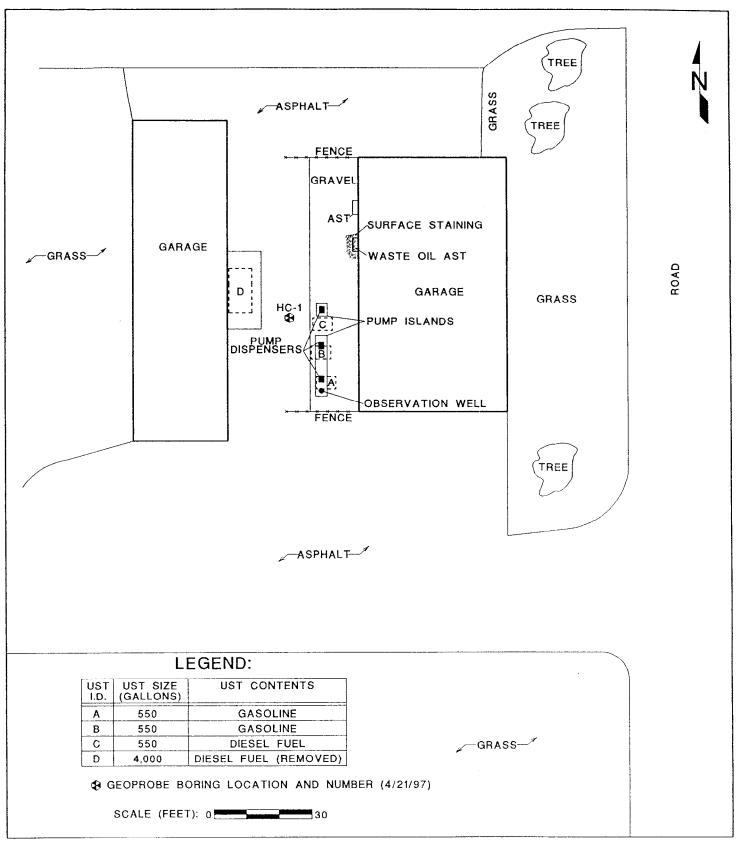


FIGURE 1 SITE FEATURES HOLY CROSS CEMETERY MILWAUKEE, WISCONSIN

A D V E N T

ENVIRONMENTAL SERVICES, INC. DATE: 10/17/97 DRAWING #970087.01B

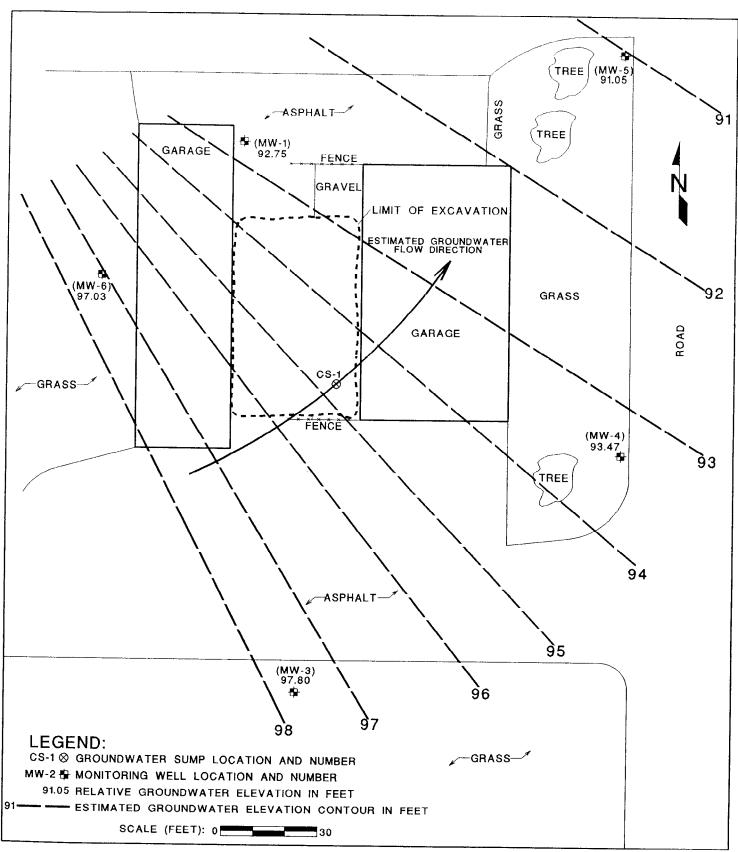


FIGURE 9 GROUNDWATER ELEVATIONS (8/11/98)
HOLY CROSS CEMETERY
MILWAUKEE, WISCONSIN

ADVENT

ENVIRONMENTAL SERVICES, INC. DATE: 8/23/99 DRAWING #970087.02F

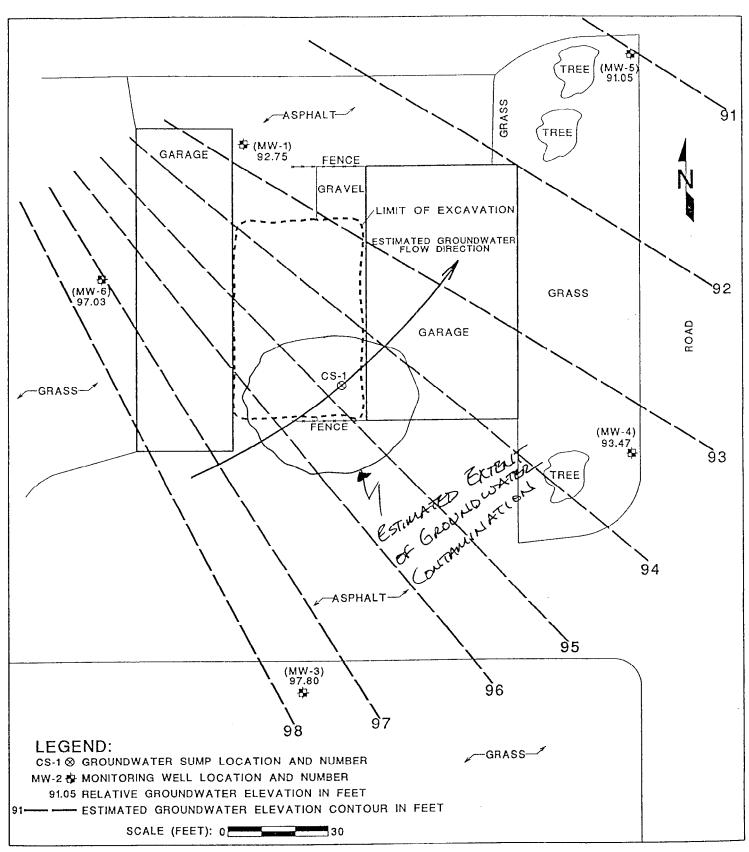


FIGURE 6 GROUNDWATER ELEVATIONS (8/11/98)
HOLY CROSS CEMETERY
MILWAUKEE, WISCONSIN

ADVENT

ENVIRONMENTAL SERVICES, INC. DATE: 9/15/98
DRAWING #970087.02F

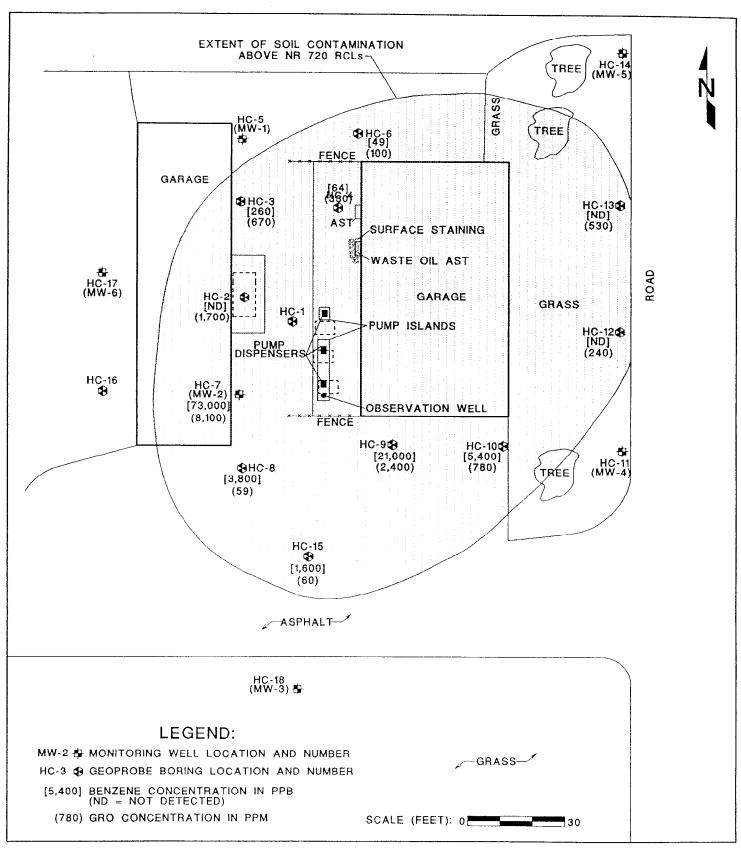


FIGURE 2 EXTENT OF SOIL CONTAMINATION ABOVE GENERIC RCLs
HOLY CROSS CEMETERY
MILWAUKEE, WISCONSIN

ADVENT

ENVIRONMENTAL SERVICES, INC. DATE: 10/21/97 DRAWING #970087.01E

TABLE 6 (page 1 of 3) **ANALYTICAL RESULTS - GROUNDWATER** HOLY CROSS CEMETERY MW-1 MW-2/CS-1 Pre-remediation Post-remediation Pre-remediation Post-remediation NR 140 Groundwater Date 7/31/97 12/3/97 8/11/98 11/16/98 2/18/99 5/14/99 7/31/97 12/3/97 8/11/98 11/16/98 2/18/99 5/14/99 5/14/1999* Quality Standards Dissolved Oxygen (ppm) 3.10 2,60 3.05 2.54 3.00 1.31 0.35 0.40 0.45 0.40 0.50 0.09 94.54 GW elevation 94.96 94.96 92.25 93.97 94.51 87.97 ------ANALYTE ES PAL 1,800 770 430 GROs (ppb) ND ND ND ND ND ND 4.200 15.000 120 110 NA NA 0.42 NA NA NA DROs (ppm) 0.19 NΑ ND NA NA 1.2 NA ___ Iron (ppm) ND NA NA NA NA NA ND NA NA NA NA NA NA ------NA NA Manganese (ppm) ND NA NA NA NA NA ND NA NA NA NA ---NA NΑ NA NA NA 0.090 NA NA NA NA 10 2 0.23 NA NA Nitrate (ppm) NA Sulfate (ppm) 42 NA NA NA NA NA 10 NA NA NA NA NA ---NA NA NA ND NA NA NA 15 Lead (ppb) ND NA NA NA 0.5 VOCs (ppb)1 Benzene ND ND ND ND ND ND 2,000 11,000 150 380 140 8.8 8.6 5 0.5 ND ND ND ND ND ND ND 10 2.0 Ethylbenzene 120 860 1.1 1.9 700 140 MTBE ND ND ND ND ND ND ND 15 7.0 1.0 0.98 60 ND 4.4 12 Toluene ND ND ND ND ND ND 220 340 18 2.3 1.9 ND ND 343 68 6 580 93 12.6 2.8 480 Trimethylbenzenes ND ND ND ND ND ND ND 1.1 1.1 96 ND ND ND ND ND 0.97 0.68 0.78 Xylene (total) ND 270 2,400 110 6.3 620 124 PAHs (ppb)¹ Benzo (a) anthracene 0.033 ND NA NA NA NA ND ND NA NA NA NA NA 0.043 0.014 ND NA NA NA NA NA 0.2 0.02 Benzo (a) pyrene 0.12 NA NA NA NA ND NA NA ND ND NΑ NA NA NA NA 0.2 0.02 Benzo (b) fluoranthene ND NA NA Benzo (ghi) perylene ND ND NA NA NA NA ND ND NA NA NA NA NA ---Benzo (k) fluoranthene 0.018 ND NA NA NA NA 0.016 ND NA NA NA NA NA ---ND ND NA NA NA NA NA 0.2 0.02 Chrysene ND NA NA NA NA ND 2-methyl Napthalene ND ND NA NA NA NΑ ND 32 NA NA NA NA NA ---___ ND 230 NA NA 40 8 Naphthalene ND NA NA NA NA ND NA NA NA NA NA NA NA ND ND NA NA ND ND NA Dibenzo (a.h) anthracen NA

Concentrations in bold are above the PAL.

Concentrations in shaded boxes are above the ES.

Concentrations for the NR 140 PAL and ES standards are presented in ug/l (ppb).

DCA = dichloroethane

MTBE = Methyl-tert-butyl-ether

PAL = Preventive Action Limit

ES = Enforcement Standard

ND = not detected

Only VOCs/PAHs detected are listed.

*Duplicate sample

TABLE 6 (page 2 of 3) **ANALYTICAL RESULTS - GROUNDWATER** HOLY CROSS CEMETERY MW-3 MW-4 Pre-remediation Post-remediation Pre-remediation Post-remediation NR 140 Groundwater Date 7/31/97 8/11/98 12/3/97 11/16/98 2/18/99 5/14/99 7/31/97 12/3/97 8/11/98 11/16/98 2/18/99 5/14/99 Quality Standards Dissolved Oxygen (ppm) 1.50 1.35 2.30 1.00 1.58 0.19 2.50 1.76 1.55 3.38 3.45 7.80 GW elevation 96.26 92.86 97.80 95.92 98.07 99.49 88.28 93.47 92.83 94.81 ANALYTE ES PAL GROs (ppb) ND DROs (ppm) 0.17 NA ND NA NA NA 0.13 NA ND NA NA NA ---Iron (ppm) ND NA NA NA NA NA ND NA NA NA NA NA ---Manganese (ppm) 0.18 NA NΑ NA NA NA 0.079 NA NΑ NA NA NA Nitrate (ppm) 0.20 NA NA NA NA NΑ 0.25 NA NA NA NA NA 10 2 Suifate (ppm) 310 NΑ NA NA NA NA 80 NA NA NA NA NA ---Lead (ppb) ND NA NA NΑ NA NA ND NA NΑ NA NA NΑ 15 0.5 VOCs (ppb) Benzene ND 5 0.5 Ethylbenzene ND 700 140 MTBE ND 53 ND 12 60 Toluene ND 343 68.6 Trimethylbenzenes ND 10 ND ND 16 ND ND ND 33 ND 18 ND 480 96 Xylene (total) ND ND ND ND ND ND ND ND ND 0.56 ND ND 620 124 PAHs (ppb)1 Benzo (a) anthracene 0.050 ND NA NA NA NA 0.049 ND NA NA NA NA Benzo (a) pyrene 0.055 ND NA NA NA NA 0.052 ND NA NA NA NA 0.2 0.02 Benzo (b) fluoranthene 0.041 ND NA NA NA NΑ 0.065 ND NA NA NA NA 0.2 0.02 Benzo (ghi) perylene 0.15 ND NA NA NA NA 0.13 ND NA NA NA NA ------Benzo (k) fluoranthene 0.035 ND NA NA NA NΑ 0.032 ND NA NA NA NA ------Chrysene 0.063 ND NA NA NA NA 0.064 ND NA NA NA NA 0.2 0.02 2-methyl Napthalene ND ND NA NA NA NA ND ND NA NA NA NA ---Naphthalene ND ND NA NA NA NA ND ND NA NA NA NA 40 8 Dibenzo (a,h) anthracene 0.042 ND NA NΑ NA 0.026 NA ND NA NA NA NA

Concentrations in bold are above the PAL.

Concentrations in shaded boxes are above the ES.

Concentrations for the NR 140 PAL and ES standards are presented in ug/l (ppb).

DCA = dichloroethane

MTBE = Methyl-tert-butyl-ether

PAL = Preventive Action Limit

ES = Enforcement Standard

ND = not detected

¹ Only VOCs/PAHs detected are listed.

TABLE 6 (page 3 of 3) **ANALYTICAL RESULTS - GROUNDWATER** HOLY CROSS CEMETERY MW-5 MW-6 Pre-remediation Post-remediation Pre-remediation Post-remediation Date 7/31/97 NR 140 Groundwater 12/3/97 8/11/98 11/16/98 2/18/99 5/14/99 7/31/97 12/3/97 8/11/98 11/16/98 2/18/99 5/14/99 Quality Standards Dissolved Oxygen (ppm) 1,00 1.20 1.00 0.45 1.15 0.19 0.65 0.48 1.88 2.54 1.30 0.78 GW elevation 98.23 89.12 91.05 89.93 90.95 100.98 93.91 97.03 96.10 96.10 ANALYTE ES PAL GROs (ppb) 75 ND ND ND ND 56 89 ND ND ND 430 ND ------DROs (ppm) 0.35 NA 0.51 NA NA NA 0.33 NA ND NA NA NA Iron (ppm) ND NA NA NA NA NA ND NA NA NA NΑ NA ---Manganese (ppm) 0.061 NA NA NA NA NA ND NA NA NA NA NA ---Nitrate (ppm) 0.28 NA NA NA NA NA 0.54 NA NΑ NA NA NA 10 2 Sulfate (ppm) ND NA NA NA NA NA ND NA NA NA NA NA ------Lead (ppb) ND NA NA NA NA NA ND NA NA NA NA NA 15 0.5 VOCs (ppb)1 Benzene ND 5 0.5 Ethylbenzene ND 700 140 MTBE ND 4.8 39 13 ND 82 ND ND ND ND ND ND 60 12 Toluene ND 343 68.6 Trimethylbenzenes ND ND 2.8 ND 1.6 ND ND ND ND ND ND ND 480 96 Xylene (total) ND 620 124 PAHs (ppb) Benzo (a) anthracene 0.050 ND NA NA NΑ NA 0.023 ND NA NA NA NA Benzo (a) pyrene 0.053 ND NA NA NA NA 0.015 ND NA NA NA NA 0.2 0.02 Benzo (b) fluoranthene 0.057 ND NA NA NA NA 0.022 ND NA NA NA NA 0.2 0.02 Benzo (ghi) perylene 0.11 ND NΑ NA NA NA ND ND NA NΑ NA NA ------Benzo (k) fluoranthene ND ND NA NA NA NΑ 0.022 ND NA NA NA NA ------Chrysene 0.052 ND NA NA NΑ NA ND ND NA NA NA NA 0.2 0.02 2-methyl Napthalene ND ND NA NA NA NA ND ND NA NA NA NΑ Naphthalene ND ND NA NA NA NA ND ND NA NA NA NA 40 8 Dibenzo (a.h) anthracen 0.065 ND NA NA NA NA 0.0023 ND NA NA NA NA

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